

# Health Services Research

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# Health Services Research and Global Health

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# BACKGROUND

The evolution of global health (Bunyavanich and Walkup 2001; Koplan et al. 2009; Fried et al. 2010) from its roots in international health to its current focus on health systems strengthening (HSS) has created substantial opportunities for social scientists to contribute meaningfully to the field. Whereas international health generally focused on low- and middle-income countries, emphasized bilateral cooperation, and attracted researchers from medicine and public health, the field of global health encompasses a much broader vision.

Global health seeks to address health issues that transcend national boundaries, require global cooperation to address effectively, and involve multiple disciplines (Koplan et al. 2009; Fried et al. 2010). Consistent with the broadening of public health generally (Institute of Medicine 2001), global heath views economic, political, social, and cultural policies and practices as fundamental determinants of health and potential levers for improving health, at both individual and population levels. With the epidemiologic transition of many countries from infectious to chronic diseases, increased speed of global communication and travel, and greater recognition of the interconnectedness of our economic, political, and environmental futures, the field of global health calls for the involvement of disciplines in addition to medicine and public health such as anthropology, economics, political science, sociology, organizational behavior (OB), psychology, and others.

Based on evidence of persistently poor global health outcomes despite increased investments (Ravishankar et al. 2009) and pressure to meet the Millennium Development Goals in health (Wagstaff and Claeson 2004; UN

Millennium Project 2005; McCurry 2008), the World Health Organization (WHO) has called for a new approach to global health, which preserves efforts to address infectious disease and public health but also elevates the importance of HSS (WHO 2000, 2007). The WHO defines a health system as all organizations, institutions, resources and people whose primary purpose is to improve human health (WHO 2000, 2007). Strengthening health systems means addressing key constraints that might limit the performance of the health system where performance includes accessibility, utilization, quality, or efficiency of health services. These properties of health services are of particular interest to health services researchers, who bring valuable conceptual and methodological expertise to the study of these issues. Given the current substantial attention to health systems within the field of global health, the need for rigorous health services research is paramount. This Theme Issue of *Health* Services Research publishes outstanding work in several critical areas of global health and illustrates the value of diverse disciplines in addressing key research questions in this field.

The featured papers tackle several pressing issues including (1) the role of decentralizing health care services on patient satisfaction and on catastrophic health expenditures (Boyer and colleagues), (2) the degree to which people in a postconflict setting value perceived technical quality of care over convenience, courtesy and other system attributes (Kruk and colleagues), (3) factors most strongly associated with the responsiveness of a nation's health system (Robone and colleagues), (4) identification of common features that drive national choices to adopt universal health insurance (Wang and colleagues), (5) racial disparities in childhood insurance and the basis of these disparities (Wehby and colleagues), and (6) the links between hospital organizational culture and hospital performance including profitability and patient satisfaction (Zhou and colleagues). Together, the papers involve data from multiple countries and continents. Additionally, the papers reflect a diversity of disciplinary perspectives as is common in health services research.

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# DISCIPLINARY VIEWS OF PERFORMANCE OF HEALTH SERVICE ORGANIZATIONS

#### Overview

Diverse disciplinary perspectives have been applied to explain the performance of organizations in general and of health service organizations in particular. Commonly applied disciplinary perspectives include OB and organizational theory (OT), economics, psychology, political science, sociology, and anthropology. Although disciplinary perspectives may differ in their focus on various actors and levels of decision making (e.g., individual, community, governmental), together they address key determinants of intermediate outcomes (e.g., access, utilization, quality, cost, technical and allocative efficiency, and responsiveness of health services) and longer term impacts on health status, equity, risk protection, and satisfaction. The interrelationships among these determinants, outcomes, and impacts (Figure 1) are multifaceted and complex, involving multilevel effects across individuals, organizations, communities, health systems, and governments. Taken as a whole, these interrelationships give rise to important hypotheses and areas of empirical inquiry for health services researchers.

Our overview of these disciplines in the context of global health is not intended to be exhaustive but rather to highlight key aspects of various disciplinary approaches and to demonstrate the potential contributions of interdisciplinary work. This Theme Issue illustrates with original literature the various theoretical perspectives that shed light on the performance of health systems and health service organizations across diverse settings.

#### Organizational Behavior and Organizational Theory

Organizational behavior focuses on the *micro*-level dynamics within an individual organization, such as interactions among staff and internal resource flows, whereas OT addresses the *macro*-level dynamics of the organization as a whole in its interactions with other organizations and its environment. The approaches and methods of OB and OT are particularly valuable in the field of global health, as organizations delivering health care face diverse contexts across various geographies, which can substantially alter the effectiveness of similar policies. OB and OT allow researchers to delve into determinants of organizational performance at the facility or agency level, with ample attention to contextual variables such as organizational culture, leadership,

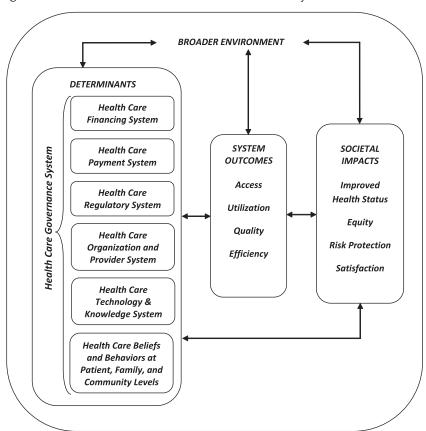


Figure 1: Framework for Health Services in Health Systems

implementation capability, and collaborative, cross-country learning. The OB and OT perspectives and methods are important in global health, as variation in organizational performance across national contexts provides the opportunity to identify and expand successful organizationally focused approaches, which are sensitive to context. The paper by Zhou and colleagues applies an OB and theory perspective to the question of how organizational culture of hospitals in China may influence hospital performance. The research is important as it adapts existing instruments for measuring organizational culture to a new setting, hospitals in China, demonstrating the potential for leveraging proven health services research tools in novel global health contexts. The paper also provides further evidence about the variability and importance

of organizational culture for performance, even within a fairly centrally regulated health system.

#### **Economics**

Economic research on health service delivery organizations has primarily focused at the micro-level on provider payment arrangements, and at the macro-level on questions of market regulation and competition, technology adoption, insurance incentives, ownership structure, service pricing, and production efficiency. Economic analysis is especially critical in the study of global health systems. Particularly in low- and middle-income settings, understanding global tradeoffs and the comparative effectiveness of alternative investments within and across countries is central for international policy makers. Additionally, the use of operations research and simulations of various policy choices and their impact on health outcomes and costs can generate data to inform international debates concerning health investments globally. Such modeling can provide important insights in countries where routine population-based survey data are lacking. Last, behavioral economics can contribute meaningfully to global health, as the complexity of many global health decisions may be understood with alternative decision making models including concepts of framing, heuristics, regret, and other social, cognitive, and emotional inputs to policy choices. This line of research can help global actors identify the impact of information on choice and the role of historical framing in influencing future tradeoffs, among other topics of research.

The paper by Boyer and colleagues examines how system regulation and organization (measured by the level of decentralization) can influence individuals' catastrophic health expenditures and satisfaction, using original data from Cameroon. The research is important as it highlights the economic consequences for individuals of having to travel longer distances for health care, particularly in low-income settings, and the potential benefits of decentralizing such services, particularly in the case of HIV care. The paper highlights decentralization as a potential policy tool to increase risk protection in health systems but also cautions that decentralization alone is insufficient to ensure protection, which likely require innovative financing reforms as well. The paper by Wehby and colleagues, also concerned with financial protection, examines the scope of racial disparities in health insurance in Argentina, Brazil, Ecuador, and Chile with careful attention to factors that may account for the racial disparities. The paper indicates both income and geographic

location as crucial factors underlying racial disparities, suggesting focal levers for addressing these inequities in insurance coverage.

### **Psychology**

Models from psychology emphasize the role of historical experiences and accept the influence of the unconscious on behavior; these perspectives suggest that individuals cannot always choose how they behave, or consciously know why they are behaving as they are. Psychology also provides theoretical and empirical insights into human motivation that are integral to many aspects of effective health service delivery, including human resource management in health care organizations, health seeking behavior, and healthy lifestyle promotion in communities. With theories spanning biological, social, and environmental determinants, psychology can provide important guidance on how to motivate both patients and providers in health care settings. Multiple subfields of psychology have relevance in global health. For example, behavioral psychology can foster greater appreciation for the types of environmental stimuli that might be most powerful in diverse geographic settings with varying historical relationships. Organizational psychology provides deeper understanding of intergroup dynamics and power relations, particularly as these relate to boundary-spanning activities and working across donor and recipient groups as is common in global health settings.

The paper by Kruk and colleagues applies a discrete choice experiment to understand the formation of preferences for health care in the postconflict, low-income setting of Liberia. The paper finds that the perceived technical quality of care including perceived competence of the providers and availability of medication are dominant influences on health care preferences and utility, whereas less technical aspects of health services such as courtesy, waiting time, and convenience were less critical to patients. The findings have important implications for efforts to rebuild health systems after conflicts, suggesting that priority given to human resources for health and supply chain capacity building efforts may be most valued by patients and communities in these settings.

#### Political Science

Health services research in political science has focused on the politics of health care policy making, the governance of the health sector, and the evaluation of health policy. Political science studies have provided important insights into the processes of agenda setting, issue framing, advocacy network formation, and collective action. Units of analysis range from individuals to social movements to global health organizations to state and federal governments. Political science also encompasses policy analysis methods that can be used to compare the net benefits of alternative government policies. Political science models draw attention to the differential power relations and strategic behavior among stakeholders in the health care policy arena. Understanding these political dynamics among stakeholders is especially salient in the case of global health policy making where traditional domestic interests are joined by numerous intergovernmental and transnational nonstate actors, such as the WHO and global nongovernmental organizations. Developing effective governance mechanisms for the evolving global health architecture, as well as for national health systems facing new global challenges, is another critical dimension of global health to which political science approaches are well-suited.

The paper by Wang and colleagues examines key features of 10 countries that passed universal health insurance either prior to 1958 or between 1967 and 2010. They identify a set of forces that shed light on the roles of historical context, ongoing dynamic pressures (both economic and political), and leadership within key moments of potential national change. Their finding on the role of leadership holds potentially important implications for the ongoing implementation of health reform in the United States.

# Sociology

Sociological models are distinguished from psychology, economics, and OB/OT by the primacy they accord to social and community structures in explaining individual and OBs. Sociological approaches emphasize how individuals' behaviors are shaped by gender, race, ethnicity, age, religion, social class, and the attendant socially constructed meanings of these. Sociological perspectives are particularly valuable in global health, as issues related to social capital and disparities reflect some of the most pressing problems in health globally. Particularly in countries with large informal economies and limited insurance for health, social determinants of health (such as poverty, social class, and stigma) are central to improving health. Also germane for global health is the growing area of network theory research, which integrates analysis of both social and organizational relationships to detect patterns of behavior, power, and information flow that may be linked to patterns of health services provision and outcomes.

The paper by Robone and colleagues uses a novel approach that models variation in the responsiveness of health systems across 66 countries using data from the World Health Survey, measured by individual reports about the dignity, confidentiality, promptness of attention, and other qualities of the health system. The paper finds that although total health expenditures are positively associated with measured responsiveness, the percent of expenditures that are publicly financed is negatively associated with responsiveness. The research is interesting as it focuses on an aspect of health system performance rarely reported, although one with potentially important influences on community satisfaction and sustained national support for health investments.

# Anthropology

Anthropological research on health services has demonstrated the importance of complementing traditional biomedical approaches with attention to the particular social and cultural contexts in which service delivery occurs. Anthropological studies seek to understand and characterize social reality as perceived by the participants in specific social processes; in the case of health services, such studies can reveal aspects of health needs and interventions other than those used by clinical medicine. Anthropological research methods emphasize detailed documentation and inductive analysis of observed social life as a basis for grounding theory. Anthropological methods of inquiry are increasingly recognized as valuable tools for understanding the behavior of both providers and recipients in the micro-contexts of health service delivery. In global health, anthropology has highlighted the ways in which global flows of knowledge and technology intersect with local meanings and structures of health and well-being, including instances in which international aid has had unintended consequences on its beneficiaries (Stuckler, King, and Basu 2008; Janes and Corbett 2009). Anthropological approaches are therefore essential to global health to facilitate understanding of the diverse cultural contexts in which health service delivery occurs and to adapt health interventions to specific social milieus. Several of the issues addressed by the current set of papers —culture, responsiveness, preferences, and decentralization—could also be further informed by an anthropological lens.

#### **Summary**

Health services research has substantial promise for making valuable contributions to HSS and global health. Social scientists doing global health services

research need to work collaboratively with clinicians, epidemiologists, engineers, and other disciplines. At the same time, understanding the unique strengths and paradigms of OB/OT, economics, psychology, political science, sociology, and anthropology as applied to the study of health services can help policy makers, practitioners, and researchers from other disciplines and fields consider a wider range of potential determinants of and interventions to improve performance of health services and health systems.

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# REFERENCES

- Bunyavanich, S., and R. B. Walkup. 2001. "Us Public Health Leaders Shift Toward a New Paradigm of Global Health." *American Journal of Public Health* 91 (10): 1556–8.
- Fried, L. P., M. E. Bentley, P. Buekens, D. S. Burke, J. J. Frenk, M. J. Klag, and H. C. Spencer. 2010. "Global Health Is Public Health." *Lancet* 375 (9714): 535–7.
- Institute of Medicine. 2001. Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC: National Academy Press.
- Janes, C. R., and K. K. Corbett. 2009. "Anthropology and Global Health." Annual Review of Anthropology 38 (1): 167.
- Koplan, J. P., T. C. Bond, M. H. Merson, K. S. Reddy, M. H. Rodriguez, N. K. Sewankambo, and J. N. Wasserheit. 2009. "Towards a Common Definition of Global Health." *Lancet* 373 (9679): 1993–5.
- McCurry, J. 2008. "G8 Meeting Disappoints on Global Health." *Lancet* 372 (9634): 191–4.

- Ravishankar, N., P. Gubbins, R. J. Cooley, K. Leach-Kemon, C. M. Michaud, D. T. Jamison, and C. J. Murray. 2009. "Financing of Global Health: Tracking Development Assistance for Health from 1990 to 2007." *Lancet* 373 (9681): 2113–24.
- Stuckler, D., L. P. King, and S. Basu. 2008. "International Monetary Fund Programs and Tuberculosis Outcomes in Post-Communist Countries." *PLoS Medicine* 5 (7): e143
- UN Millennium Project. 2005. Investing in Development: A Practical Plan to Achieve the Millennium Development Goals. New York: Earthscan.
- Wagstaff, A., and M. Claeson. 2004. *The Millennium Development Goals for Health: Rising to the Challenges*. Washington, DC: The World Bank.
- WHO. 2000. The World Health Report 2000: Health Systems: Improving Performance. Geneva: World Health Organization.
- ------. 2007. Everybody's Business: Strengthening Health Systems to Improve Health Outcomes: Who's Framework for Action. Geneva: World Health Organization.